

# INTERNATIONAL STANDARD

ISO  
7374

First edition  
1987-12-15



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION  
ORGANISATION INTERNATIONALE DE NORMALISATION  
МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

## Photography — 110-size cartridges — Dimensions and format of film and backing paper

*Photographie — Chargeurs de format 110 — Dimensions et présentation du film et du papier protecteur*

STANDARDSISO.COM : Click to view the full PDF of ISO 7374:1987

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7374 was prepared by Technical Committee ISO/TC 42, *Photography*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

The International Organization for Standardization calls attention to the fact that it is claimed that compliance with this International Standard may require the use of an invention covered by patent rights owned by Eastman Kodak Company. The International Organization for Standardization takes no position with respect to the validity of this claim or of any patent rights in connection therewith. The patent owner has assured the International Organization for Standardization that he is willing to grant a licence under these rights on reasonable and non-discriminatory terms and conditions to applicants desiring to obtain such a licence. The patent holder's undertakings in this respect are being placed on file with the International Organization for Standardization and licence details may be obtained from Eastman Kodak Company, whose address is :

Eastman Kodak Company  
Patent Department  
343 State Street  
Rochester  
NEW YORK 14650  
USA

No representation or warranty is made or implied that this is the only licence that may be required to avoid infringement in the use of this International Standard.

# Photography – 110-size cartridges – Dimensions and format of film and backing paper

## 1 Scope and field of application

This International Standard specifies the dimensions of 110-size film and backing paper.

This product was designed in SI units, which are therefore prime, unless specifically noted to the contrary in this International Standard.

This International Standard is intended to be used in conjunction with ISO 7261 and ISO 7330 to completely specify 110-size cartridges.

## 2 References

ISO 1, *Standard reference temperature for industrial length measurements.*

ISO 5, *Photography – Density measurements*

- *Part 2 : Geometric conditions for transmission density.*
- *Part 3 : Spectral conditions.*

ISO 554, *Standard atmospheres for conditioning and/or testing – Specifications.*

ISO 7261, *Photography – 110-size cartridges – Dimensions.*

ISO 7330, *Photography – 110-size cartridges – Location and dimensions of film exposure and film identification notches.*

## 3 Dimensions

### 3.1 General

Dimensions apply at the time of cartridge manufacture at standard atmospheric conditions of  $23 \pm 2$  °C and (50 ± 5) % relative humidity, as specified in ISO 554.<sup>1)</sup>

### 3.2 Paper format

The paper format dimensions shall be as given in figure 1.

### 3.3 Film format

The film format dimensions shall be as given in figure 2.

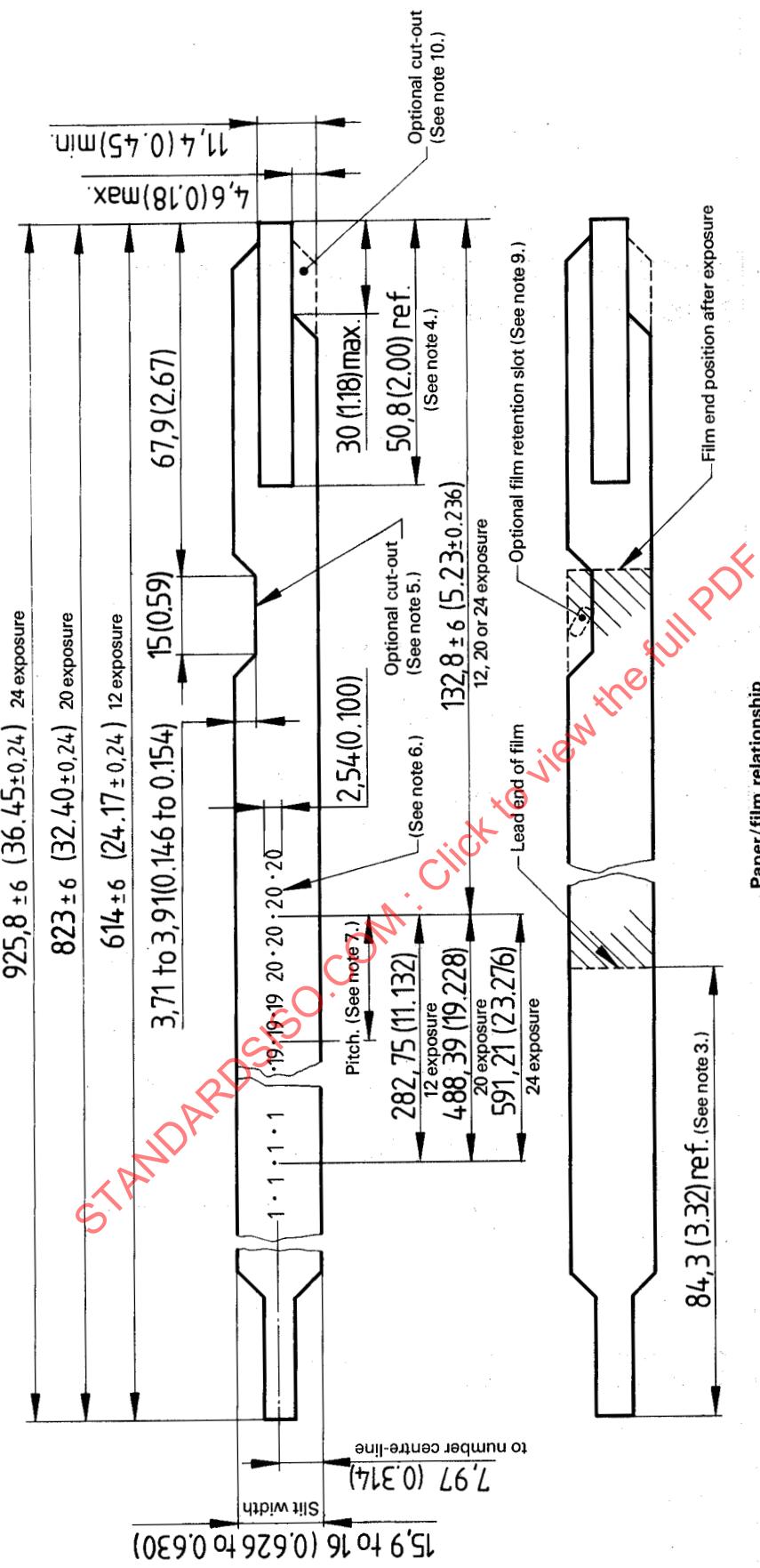
### 3.4 Negative films format

The negative films format dimensions shall be as given in figure 3.

### 3.5 Reversal films format

The reversal films format dimensions shall be as given in figure 4.

1) All measuring instrument calibrations are referred to a temperature of 20 °C (as specified in ISO 1) and a relative humidity of 50 %.



## NOTES

1 Viewed from rear of camera.

2 Tolerance ± 1,0 (± 0.04) unless otherwise stated.

3 Frame number corresponding to the exposure number shall appear in the camera window.

4 A black band or other identifier in the cartridge window indicates when the film is fully wound into the cartridge take-up chamber.

5 Optional cut-out provides access to film retention device if used.  
(See note 9.)

6 Number of numerals is optional.

7 Pitch 25,704 8 (1.012 00) ref. based upon film thickness of 0,10 mm (0.004 in.).

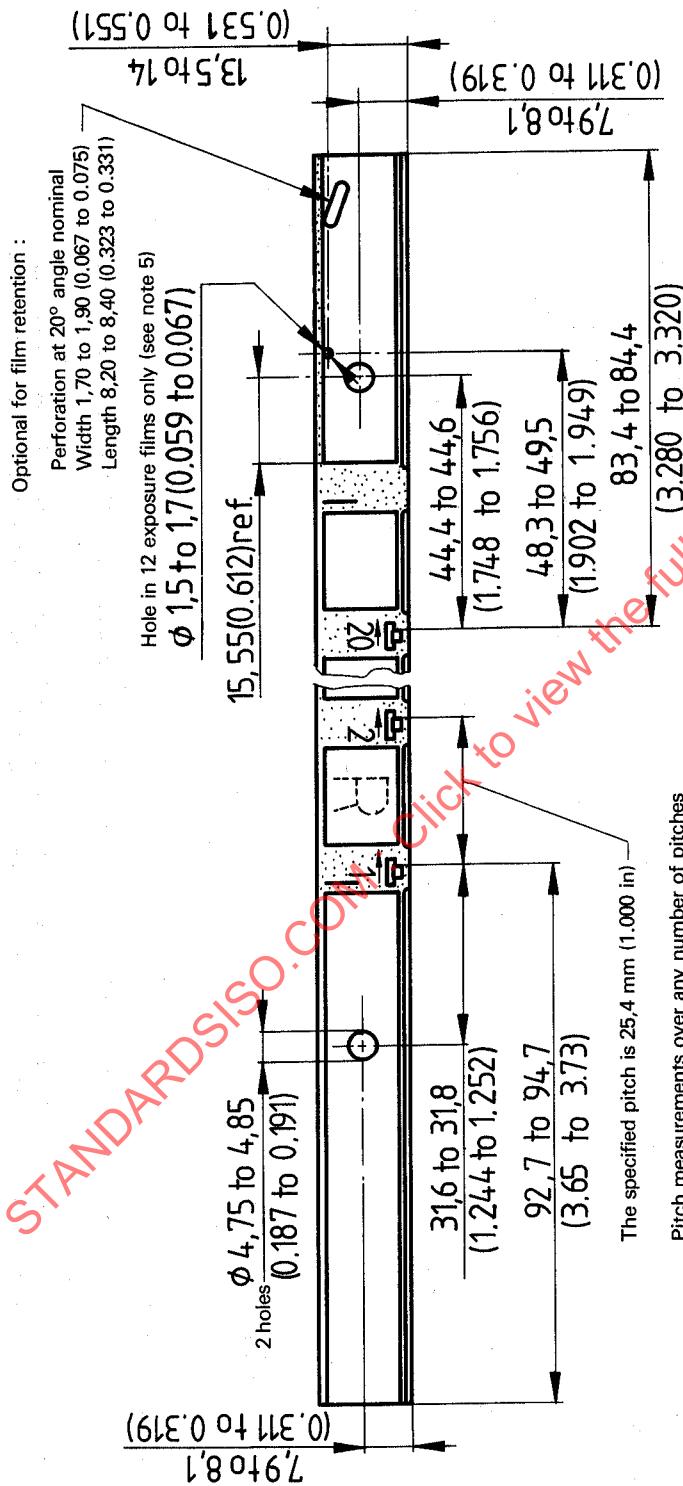
8 Paper tear strength shall be sufficient to permit removal of paper and film from the take-up chamber (by pulling on the paper trailer).

9 Film retention slot, if used, shall fall within optional cut-out after exposure.

10 Optional cut-out reduces incidence of camera metering by paper trailer.

Figure 1 — Paper format

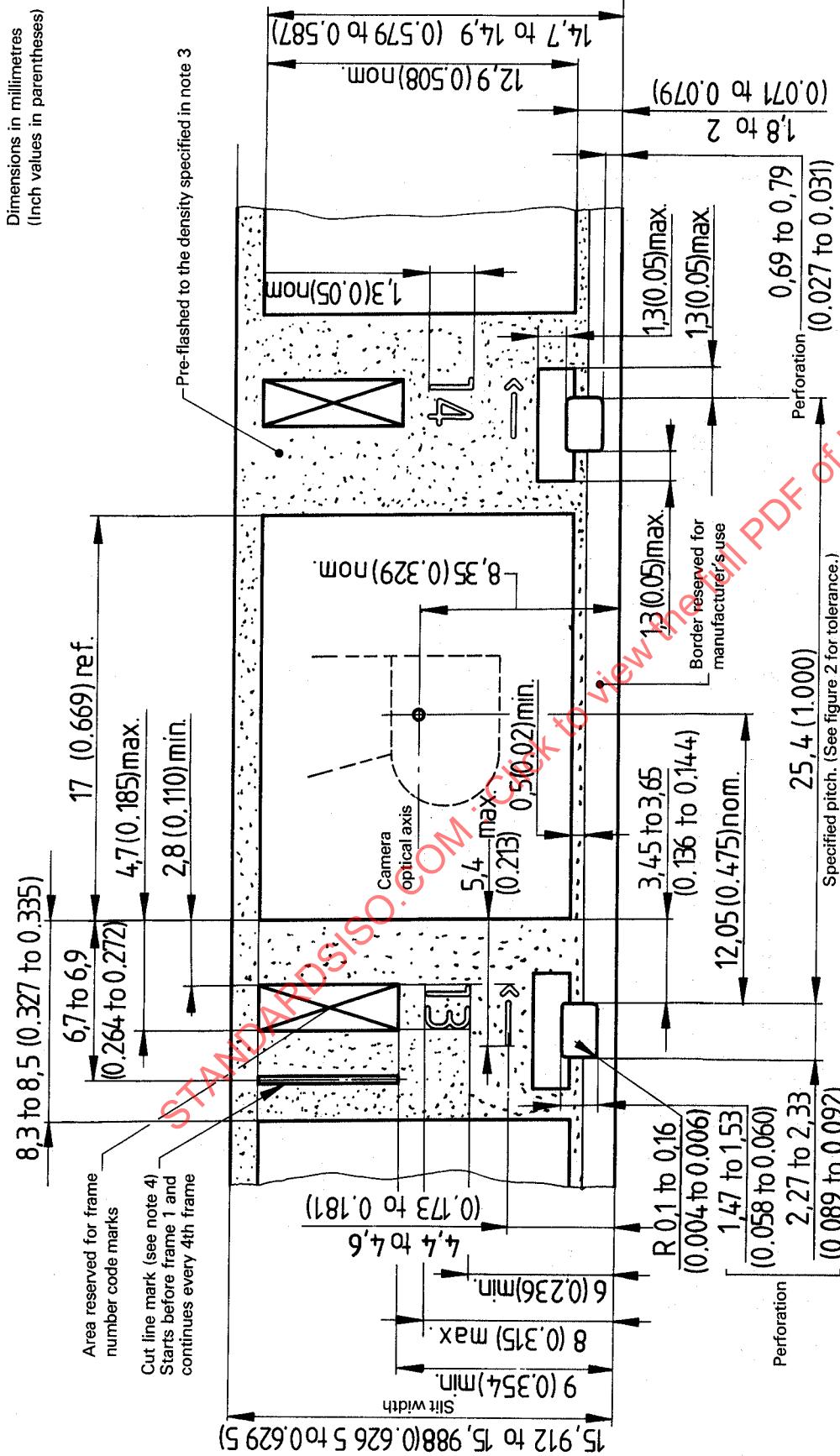
Dimensions in millimetres  
(Inch values in parentheses)



## NOTES

- 1 Viewed from support side as film goes through camera.
- 2 Negative format illustrated.
- 3 Total film length for:
  - 24 exposures : 760 to 764 mm (29.9 to 30.1 in)
  - 20 exposures : 688 to 692 mm (25.9 to 26.1 in)
  - 12 exposures : 455 to 459 mm (17.9 to 18.1 in)
- 4 A path throughout the entire length of film 4.85 mm (0.191 in) wide and in line with 4.80 mm (0.189 in) diameter holes should not be violated with other holes of any type.
- 5 For use in automatic sensing equipment.

Figure 2 — Film format



## NOTES

- 1 Viewed from support side of film
- 2 Image to show on print : 15,80 mm (0,622 in) by 12,00 mm (0,472 in) based upon camera aperture 19,30 mm (0,760 in) by 13,50 mm (0,532 in) and camera positioning tolerance  $\pm 1,15$  mm ( $\pm 0,045$  in).
- 3 Film is preflashed to ISO Status M diffuse blue, green and red densities not less than 0,8 above  $D_{min}$ , when measured with a densitometer complying with the geometric conditions specified in ISO 5-2 for diffuse density and with the spectral conditions specified in ISO 5-3 for Status M densities.
- 4 Cut line width 0,075 to 0,175 mm (0,003 to 0,007 in).

Figure 3 – Negative film format